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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

AVELLINO, JOSEPH E

ART UNIT PAPER NUMBER

2143

DATE MAILED: 10/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/879,811

Applicant(s)

JOHNSON ET AL.

Examiner

Joseph E. Avellino

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-148 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-148 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 01/15/02
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. Claims 1-148 are presented for examination; claims 1, 25, 49, 66, 83, 103, 123 and 136 independent.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 7, 12, 13, 15, 31, 37, 39, 50, 59, 60, 67, 76, 77, 94-96, 114, 116, 127, and 123-148 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. The above-mentioned claims directly or indirectly recite the limitation "or a combination thereof". This does not distinctly define the invention since it suggests a combination of any previous limitations preceding it in the claim, but not specifically which limitations. For examination purposes, it will be understood that any limitations in these claims can be interpreted in the alternative (i.e. "or"). Correction is required.

Specification

5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-148 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-164 of copending Application No. 09/879810 (hereinafter '810). Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications disclose subject matter pertaining to a system and method for providing differentiated service in an information management environment, comprising a plurality of processing engines that are distributively interconnected, say system being capable of providing session-aware differentiated service. Support for this rejection can be found in claim 15 of the '810 application

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-51, 53-68, 70-126, 128, and 136-139 are rejected under 35 U.S.C. 102(e) as being anticipated by Anerousis et al. (USPN 6,760,775) (hereinafter Anerousis).

9. Referring to claim 1, Anerousis discloses a system for providing differentiated service in an information management environment, comprising a plurality of processing engines that are distributively interconnected, said system being capable of providing session-aware differentiated service (e.g. abstract; Figure 3, 310, 320, 325; col. 15, lines 43-60).

10. Referring to claim 2, Anerousis discloses said processing engines are assigned separate information manipulation tasks in an asymmetrical multi-processor configuration (col. 8, lines 45-53).

11. Referring to claim 3, Anerousis discloses said processing engines are capable of interacting in a deterministic manner to provide said differentiated service (the term "deterministic manner" can be broadly construed as "without human interaction") (col. 8, lines 45-61).

12. Referring to claim 4, Anerousis discloses said system being coupled to a network at a point outside a core of said network (Figure 1, 100, 150, 140).

13. Referring to claim 5, Anerousis discloses said system comprises a network endpoint information management system (i.e. content delivery system to a client) (e.g. abstract; Figures 1-5).

14. Referring to claim 6, Anerousis discloses said at least one of said plurality of processing engines is located physically remote from at least one other of said plurality of processing engines (Figure 3, 310, 320, 325).

15. Referring to claim 7, Anerousis discloses two or more of said processing engines comprise separate components of a cluster of information management systems (i.e. a content delivery system over a network) (Figure 3).

16. Referring to claim 8, Anerousis discloses comprising an operating system (it is inherent that any computing device requires an operating system, otherwise the device would not operate) and deterministic system software (i.e. load balancing algorithm software) in communication with the OS; said deterministic system software having state knowledge of resource utilization (i.e. load) within said system and being capable of deterministically controlling interaction between processing engines in response to communication from OS (cols. 17-19).

17. Referring to claim 9, Anerousis discloses said processing engine comprises a monitoring agent capable of monitoring resource characteristic within said processing engine, and wherein said system further comprises a system monitor in communication with said monitoring agent that is capable of performing system management (col. 18, lines 50-55).

18. Referring to claim 10, Anerousis discloses comprising a deterministic system BIOS that provides a communication interface between plurality of processing engines and the OS, capable of managing system calls made to processing engines of system architecture from at least one application in communication with said OS (cols. 17-19).

19. Referring to claim 11, Anerousis discloses said deterministic system BIOS is capable of responding to application requests for resources with availability information (col. 18, lines 32-67).

20. Referring to claim 12, Anerousis discloses said application is a network content delivery application (i.e. a routing application in a router) (cols. 16-19).

21. Referring to claim 13, Anerousis discloses said differentiated service comprises monitoring one or more system performance parameters (i.e. load) related to information management in real time or on a historical basis (col. 18, lines 32-67).

22. Referring to claim 14, Anerousis discloses said differentiated service comprises managing information traffic flow (i.e. routing) between two or more processing engines (col. 18).

23. Referring to claim 15, Anerousis discloses said differentiated service comprises managing performance of one or more information manipulation tasks (i.e. serving web pages from host servers) related to said information management by two or more processing engines concurrently based at least in part on one or more priority-indicative parameters (i.e. pertaining to an already established flow or an IP address subnet related to a high priority services) associated with said information manipulation tasks (col. 18, lines 19-67).

24. Referring to claim 16, Anerousis discloses manipulating information in a differentiated manner (i.e. providing differentiated services for transmitting web pages)

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based in part on a status of at least one parameter (i.e. IP subnet) associated with a request received from a network for said information manipulation (col. 18, lines 32-60).

25. Referring to claim 17, Anerousis discloses said parameter comprises priority-indicative information (i.e. IP subnet) associated with said request (col. 18, lines 32-60).

26. Referring to claim 18, Anerousis discloses said system comprises a content delivery system, wherein said request comprises a request for content, and wherein said manipulating information comprises delivering content (Figure 3 and related portions of the disclosure).

27. Referring to claim 19, Anerousis discloses said system comprises a network endpoint content delivery system (e.g. abstract).

28. Referring to claim 20, Anerousis discloses said system comprises an OS that is configured in deterministic communication with system components that are external to said system (col. 18, lines 32-60).

29. Referring to claim 21, Anerousis discloses said external system comprise clustered arrangements of geographically dispersed systems (Figure 3).

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30. Referring to claim 22, Anerousis discloses said external system components comprise components not directly coupled to said system through a common distributed interconnect (i.e. there are other routers dispersed between the SLR clusters) (Figure 3).

31. Referring to claim 23, Anerousis discloses said differentiated service comprises differentiated business service (the term "differentiated business service" can be broadly construed as being able to use the system in a business manner, since it is well known that web hosting is a lucrative business, it could be understood that Anerousis does disclose using the system as a differentiated business service) (col. 1, lines 15-32).

32. Referring to claim 24, Anerousis discloses said differentiated service comprises differentiated information service (col. 18, lines 32-60).

33. Claims 25-50 are rejected for similar reasons as stated above.

34. Referring to claim 51, Anerousis discloses said two or more of said plurality of processing engines are distributively interconnected across a network by a virtual distributed interconnect backplane (i.e. tunneled connections) (Figure 9; col. 7, lines 7-33).

35. Claims 53-54 are rejected for similar reasons as stated above.

36. Referring to claim 55, Anerousis discloses the plurality of processing engines is located in a separate chassis from one another in a common facility to form a data center configuration in said common facility (col. 6, lines 40-65; col. 20, lines 10-17).

37. Referring to claim 56, Anerousis discloses said plurality of processing engines comprise a system management processing engine (i.e. load balancing, etc.), a storage management processing engine (i.e. web server load distributor), and an application processing engine (execution of applications to provide load balancing) (e.g. abstract; Figures 1-8; cols. 16-18).

38. Claim 57 is rejected for similar reasons as stated above.

39. Referring to claim 58, Anerousis discloses said system further comprises shared resources (i.e. bandwidth) that may be virtually exchanged between said processing engines on an as-needed basis (col. 13, lines 1-22; col. 17, line 49 to col. 18, line 18; col. 19, lines 1-32).

40. Referring to claim 59, Anerousis discloses said shared resource comprises information processing capacity (col. 13, lines 1-30).

41. Claims 60-68, and 70-91 are rejected for similar reasons as stated above.

42. Referring to claim 92, Anerousis discloses said processing engines are distributively interconnected in a configuration suitable for providing delivery traffic management policies (i.e. routing table information) to multiple components of said data center concurrently (col. 18, lines 19-67).

43. Referring to claim 93, Anerousis discloses implementing SLA policies in multiple components of said data center concurrently (col. 18, lines 32-51).

44. Claims 94-124 are rejected for similar reasons as stated above.

45. Referring to claim 125, Anerousis discloses said platforms may be dynamically added or removed (i.e. failures) from distributed interconnection with others of said distributed set of system platforms (cols. 19-20).

46. Referring to claim 126, Anerousis discloses deterministically adding or removing one or more of said platforms from distributed interconnection with others (i.e. if the load is too high in an SLR cluster, then no more requests are forwarded it, this, in essence, removes the SLR cluster from the system until the load is lowered) (col. 19, lines 1-49).

47. Claims 136-139 are rejected for similar reasons as stated above.

Claim Rejections - 35 USC § 103

48. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 52 and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anerousis in view of Scrandis et al. (USPN 6,694,455).

49. Referring to claim 52, Anerousis discloses the invention substantively as described in claim 51. Anerousis further discloses that the tunneling abstraction may be realized in a number of ways as a lower level connection using Wavelength Division Multiplexing (col. 7, lines 20-35) however remains silent upon if the virtual distributed interconnect backplane is implemented using components comprising fiber optic transmission hardware in combination with wavelength division multiplexing WDM. Scrandis discloses another communications network which uses a virtual distributed interconnect backplane is implemented using components comprising fiber optic transmission hardware in combination with wavelength division multiplexing WDM (col. 1, lines 55-65; col. 3, line 55 to col. 4, line 16). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Anerousis with Scrandis since it is well known in the art that fiber optic networks are faster and carry a higher bandwidth than normal Ethernet connections, and it is also

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well known that optimization of bandwidth is a driving factor in efficient network administration, thereby effectively combining Scrandis with Anerousis will provide a more efficient system with higher bandwidth optimization and connectivity.

50. Claim 69 is rejected for similar reasons as stated above.

Claims 127, 129-135 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anerousis in view of Cucchiara (USPN 6,430,614).

51. Referring to claim 127, Anerousis discloses the invention substantively as described in claim 125. Anerousis does not disclose virtually adding or removing one or more platforms from interconnection with others on a real time basis based on one or more characters associated with said request. In analogous art, Cucchiara discloses another system providing service which virtually adds or removes platforms from distributed interconnection with others (col. 7, lines 1-39; col. 10, lines 20-67). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Cucchiara with Anerousis to allow an improved way to provide and facilitate interaction with distributed manager information of a network, thereby allowing a network administrator access to information not readily accessible and therefore increasing usability of the system as supported by Cucchiara (col. 1, lines 59-63).

52. Claims 129-132 are rejected for similar reasons as stated above.

53. Referring to claim 133, Anerousis in view of Cucchiara disclose the invention substantively as described in claim 130. Anerousis in view of Cucchiara further disclose reading incoming classification information associated with incoming data packets and handling said incoming data packets in a differentiated manner based on said incoming classification information associated with said data packets (i.e. if a packet indicates a higher priority system, then treat it as such) (Anerousis, col. 7, lines 7-21; col. 18, lines 40-51). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Cucchiara with Anerousis to allow an improved way to provide and facilitate interaction with distributed manager information of a network, thereby allowing a network administrator access to information not readily accessible and therefore increasing usability of the system as supported by Cucchiara (col. 1, lines 59-63).

54. Claims 134 and 135 are rejected for similar reasons as stated above.

Conclusion

55. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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56. Britt (USPN 6,298,044) discloses determining if overloaded collision domains can be split to enhance network.


57. Linebarger et al. (USPN 6,788,666) discloses hybrid fiber wireless communication system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph E. Avellino whose telephone number is (703) 305-7855. The examiner can normally be reached on Monday-Friday 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (703) 308-5221. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JEA
October 13, 2004



EUNICE J. ARONCHIK
PRIMARY EXAMINER